

DROMIA WEBER, 1795 (CRUSTACEA, DECAPODA): PROPOSED
DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS.
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When checking the nomenclatural status of the currently adopted names for Mediterranean Decapoda, it was found that in several instances these current names are unavailable nomenclaturally or should be used for taxa differing from those to which they are usually given. The first of these problems is dealt with here; it concerns the generic name *Dromia* and the specific name of the only Dromiid crab which so far has been reported from the Mediterranean.

2. The generic name *Dromia* was introduced into carcinological literature by Weber (1795, *Nomencl. entomol.* : 92) who cited several species as belonging to this genus, viz., "*Dromia Rumphii* (C. *Dromia* F.)", D. "*artificiosa* S.", D. "*australasiae* (C. *aegagropila* F.)", and D. "*Caput mortuum* L.?". Of these four species *D. artificiosa* is a nomen nudum and *D. caputmortuum* is only doubtfully referred to the genus by Weber. Therefore the type of *Dromia* Weber must be chosen from the two species *D. Rumphii* or *D. australasiae*. Since Weber cited the name *Cancer Dromia* F. as a synonym of *D. Rumphii*, that species becomes the type of the genus by tautonymy. *Cancer dromia* Fabricius, 1781 (*Spec. Ins.* 1 : 501) is an erroneous spelling of *Cancer Dormia* Linnaeus, 1763 (*Amoen. Acad.* 6 : 413). In 1775, Fabricius (*Syst. ent.* : 405) still used the correct spelling *dormia* for the specific name, but changed it in 1781 to *dromia* and consistently used the incorrect spelling afterwards. However this may be, there cannot be the least doubt that according to the International Code of Zoological Nomenclature *Cancer dormia* Linnaeus, 1763, is the type-species of the genus *Dromia* Weber, 1795.

3. As has been pointed out by Rathbun (1923, *Proc. biol. Soc. Washington* 36 : 65-70) the species *Cancer dormia* is based by Linnaeus on the figures of "*Cancer Lanosus*" of Rumphius (1705, *Amboinsche Rariteitkamer* : 19, pl. 11, fig. 1) and Seba (1761, *Locuplet. Rerum Nat. Thesaur.* 3 : 42, pl. 18, fig. 1). Rathbun furthermore made it clear that the specimens of Rumphius and Seba do not belong to the genus *Dromia* as this is at present generally understood, but to the genus *Dromidiopsis* Borradaile, 1900 (*Proc. zool. Soc. Lond.* 1900 : 572). Rathbun thereupon used the name *Dromidiopsis dormia* (L.) for Linnaeus's species, obviously without realizing that this species, being the type of the genus *Dromia* Weber, cannot be removed from it.

4. A strict application of the Code now necessitates (1) the transfer of the generic name *Dromia* to the genus *Dromidiopsis* so that *Dromidiopsis* falls as a junior synonym, (2) the introduction of a new name for the genus which so far has always been known as *Dromia*. The switching of a generic name

from one well-known genus to another is something which should be avoided at all costs, and therefore the Commission is now asked to make use of its plenary powers to preserve the name *Dromia* in such a way that it can be used in the sense in which so far it has always been adopted. The simplest way to attain this end is to designate for it a proper type-species, which in this case is the Mediterranean Dromiid, which is best known as *Dromia vulgaris* H. Milne Edwards, 1837.

5. The correct name of this Mediterranean species also provides some complications. It is usually indicated as *Dromia vulgaris* H. Milne Edwards (1837, *Hist. nat. Crust.* 2 : 173), but as Rathbun (1919, *Proc. biol. Soc. Washington* 32 : 197) pointed out, the name *Cancer caput mortuum* Linnaeus (1767, *Syst. Nat.* (ed. 12) 1 : 1050) was given by Linnaeus to the same species and has priority. Rathbun consequently indicated the Mediterranean species with the name *Dromia caput mortuum* (L.). As a result of this another Dromiid name had to be changed. H. Milne Edwards (1837, *Hist. nat. Crust.* 2 : 178), for example, described a new species of Indo-West Pacific Dromiid under the name *Dromia caput mortuum*; this species was later placed in the genus *Dromidiopsis* and was known as *Dromidiopsis caputmortuum* (H. Milne Edwards). Rathbun (1919) replaced the preoccupied name *caputmortuum* H. Milne Edwards by a new name; she gave the name *Dromidiopsis edwardsi* to the species.

6. In checking the early Linnean and post-Linnean literature we found that *Cancer caputmortuum* is not the first name given to the Mediterranean Dromiid. Linnaeus (1758, *Syst. Nat.* (ed. 10) 1 : 628), for example, described his *Cancer personatus* as follows:

C[ancer]. brachyurus, thorace hirto inaequali utrinque quinquedentato, rostro quadridentato.

Planc. conch. 36. t. 5. f. 1.

Habitat in M. Mediterraneo.

Testa magnitudine pomi, rubra, uti totum corpus hirta. Rostrum bidentatum cum dente ad utrumque latus brevior. Seta utrinque ad basin caudae. Pedes duo postici quasi supra reliquos collocati.

7. The specimen described and figured by Plancus (1739, *De Conchis minus notis* : 36, pl. 5, fig. 1) under the name "*Cancer hirsutus personatus maris Syperi, vulgo Facchino Ariminensis dictus*" without any doubt is the species which at present is best known as *Dorippe lanata* (L., 1767, *Syst. Nat.* (ed. 12) 1 : 1044). Linnaeus's description of *Cancer personatus*, however, in no way fits *Dorippe lanata*, as that species has the body rather flat (so that a comparison with an apple would be senseless), and with only two instead of five teeth on the lateral margin. The description, on the contrary leaves no doubt that it actually is based on a specimen of *Dromia*, as in the Mediterranean *Dromia* the body is highly arched and indeed could well be compared with an apple, the lateral margins of the carapace bear five teeth, while also the description of the rostrum, the hairyness of the body and the situation of the legs fit extremely well. In the 12th edition of his *Systema Naturae* (1767) Linnaeus evidently realized that two species were mixed up under the name *personatus* and he erected the new *Cancer lanatus* to include Plancus's species, and omitted the reference to Plancus in his description of *Cancer personatus*, to which he

added a few more characters. For some reason or other the name *personatus* has been ignored by later authors.

8. As Linnaeus's *Cancer personatus* is a composite species, it would be best to select as its lectotype the specimen on which Linnaeus based his actual description. This specimen, however, is no longer extant. In the Linnean Collection in Burlington House, London, there are several dried and often broken specimens of Decapod Crustacea, which have no labels or other markings. During a visit to the collection in June 1956, Dr. Isabella Gordon and I found among these dried Decapoda two specimens of a Dromiid, which at first we thought might have possibly formed part of the type material of *Cancer personatus*. However, Dr. Gordon informed me later (in a letter dated 4 October 1957) that "according to Mr. Savage (who was for many years paid secretary to the Linnean Society, and very knowledgeable about everything belonging to the Society) these broken Decapods without any labels of any kind, are *not* part of Linnaeus's material". Also in the collection of the Zoological Institute in Uppsala, Sweden, no material of *Cancer personatus* is found in the Linnean Collections (cf. Holm, 1957, *Acta Univ. Upsal.* 1957 (6): 1-68). Therefore it must be assumed that no type material of *Cancer personatus* L. is in existence anymore. In order definitely to fix the identity of Linnaeus's *Cancer personatus* it seems necessary to select a neotype for that species.

9. As the neotype of *Cancer personatus* Linnaeus (1758) I now select a male specimen with a carapace length of 51 mm. and a carapace breadth of 63 mm., of which a photograph is given here on plate 3. The carapace is globose with the regions clearly indicated and not too much obscured by the dense velvety pubescence which covers the entire body but for the extreme tips of the chelae and the walking legs. The front is tridentate with the median tooth on a much lower level [why it was overlooked by Linnaeus]. There is a small tooth on each orbital margin at the base of the front. The anterolateral teeth of the carapace are five in number (including the extra-orbital tooth); there is an angular lobe behind the third and a rounded lobe behind the fourth tooth. The endostomial ridges are not very distinct. The chelipeds bear each an epipodite. The pereopods are smooth. The fourth and fifth legs are shorter than the other pereopods and placed more dorsally; they have a spine at the end of the propodus which forms a kind of subchela with the dactylus. The fifth leg is somewhat longer and more slender than the fourth.

10. The specimen selected here to be the neotype of *Cancer personatus* L. was collected on 13 August 1950 in the Bay of Cadaqués on the Mediterranean coast of N.E. Spain, by R. Zariquiey Alvarez and L. B. Holthuis. It now forms part of the collection of the Rijksmuseum van Natuurlijke Historie at Leiden, under the Registered Number Crustacea D 5425. It is labelled as the neotype of *Cancer personatus* L. and apart from this indication the parchment label bears the correct name *Dromia personata* (L.) and the information concerning locality, date, collectors and registered number mentioned above.

11. The use of the name *personatus* for the Mediterranean Dromiid has the advantages that (1) it is the nomenclaturally correct name for the species,

(2) being described in the 10th edition of Linnaeus's *Systema Naturae* it can never be replaced by an older name, (3) it does away with the ambiguous name *caputmortuum* which has been employed for two different species of Dromiidae. The fact that two different names (*vulgaris* and *caputmortuum*) were currently used for the Mediterranean Dromiid makes it the more justifiable to switch to a third name. It seems best therefore to apply the Code here strictly.

12. As the generic name *Dorippe* Weber, 1795, has several times been referred to in the present proposal, it seems best to have this name placed on the Official List together with the name *Dromia* Weber. However, there exists a nomenclatural problem concerning this name. In 1763, for example, A. Vosmaer (*Mém. Math. Phys. Acad. Sci. Paris* 4 : 635-645, pl. 18) published a paper entitled "Mémoire sur un nouveau genre de Crabes de mer (*Notogastropus*), qui a des pattes sur le dos & sous le ventre". The name *Notogastropus* is only used in the title and nowhere in the text. Vosmaer brought two forms to this "genus", the first was named by him "la première sorte" the other "le second crabe", no latin names being given. Vosmaer's first species is *Dorippe frascone* (Herbst), the second *Dorippe lanata* (L.). The name *Notogastropus* Vosmaer, 1763, if an available name, thus would have to be used for the genus which is universally known as *Dorippe* Weber, 1795. Evidently most authors considered Vosmaer's publication of *Notogastropus* to be not consistent with binominal nomenclature and therefore ignored it; I know of not a single carcinologist who actually did adopt the name *Notogastropus* for this or any other genus. On the other hand, however, the name is listed in Neaves's (1940) *Nomenclator Zoologicus* (3 : 354). Article 11(c)(i) of the Code states that "Uninominal names published prior to 1931, in works that deal only with names above the species-group, are accepted as consistent with the principles of binominal nomenclature, in the absence of evidence to the contrary". Vosmaer not only dealt with a generic name, but he also mentioned specific names. The latter were not cited by him in binominal combinations, but were treated as uninominal names. Thus, in his text (:641) Vosmaer cited the Linnean species *Cancer personatus* and *Cancer dorsipes* as "le *personatus*" and "un *dorsipes*" respectively, not using binomina here. In citing other authors he on several occasions used uninomina ("le facchino" : 639, 640, 645), binomina ("cancer *hirsutus*" : 641; "cancer *spinosus* de Rumphius" : 644) and polynomina ("Cancer *hirsutus personatus maris superi, vulgo Facchino Ariminensibus dictus*" : 639), but there is no indication that he accepted these names himself. As Vosmaer deals both with specific and generic names and since there is no indication whatever that he accepts the binominal system, his name *Notogastropus* according to Article 11 has to be rejected. This name should now be placed on the Official Index. In 1765 a Dutch translation of Vosmaer's paper was published (*Uitgez. Verh. Werken Soc. Weetensch. Europ.* 10 : 119-135, pl. 64, figs. 1, 2); here the name of the "genus" is written *Noto-gastropus*. Also this name should be placed on the Index.

13. The type-species of the genus *Dorippe* Weber, *Cancer quadridens* Fabricius, 1793, is usually cited as *Dorippe dorsipes* (L.). This practice, however, cannot be tolerated. It was Miers (1884, *Rep. zool. Coll. Alert* : 257)

who pointed out that the species described as *Cancer dorsipes* by Linnaeus (1764, *Mus. Ludov. Ulr.* : 452) is identical with *Cancer quadridens* Fabricius, 1793. Miers consequently substituted Linnaeus's specific name for that of Fabricius and named the species *Dorippe dorsipes* (L.). In his 1764 book, however, Linnaeus did not describe a new species, but referred the material of which he gave a short account to his old species *Cancer dorsipes* L., 1758 (*Syst. Nat.* (ed. 10) 1 : 630). *Cancer dorsipes* L., 1758, is based on a figure from Rumphius's *Amboinsche Rariteitkamer* (1705 : pl. 10, fig. 3) and on a copy of that figure published by Petiver (1713, *Aquat. Anim. Amboinae* : pl. 6, fig. 2). Rumphius's specimen thus is the holotype of Linnaeus's (1758) *Cancer dorsipes* (or, in case Linnaeus had additional material which he referred to that species, it is made here the lectotype). As is clearly shown by Rumphius's figure, this specimen belongs to the species of Raninid crabs, which at present is generally known as *Notopus dorsipes* (L., 1758). There can therefore be not the slightest doubt as to the fact that the specific name *dorsipes* L. cannot be used for the species of *Dorippe* : either *Cancer dorsipes* Linnaeus, 1764, is not a new name and thus belongs to the species of *Notopus*, or it is a new name and then falls as a junior homonym of *Cancer dorsipes* Linnaeus, 1758. As Miers (1884, *Rep. zool. Coll. Alert* : 257) correctly pointed out, the name *Cancer frasccone* Herbst (1785) is a subjective synonym of and has priority over *Cancer quadridens* Fabricius, 1793. The type-species of the genus *Dorippe* Weber, 1795, thus should be known as *Dorippe frasccone* (Herbst, 1785).

14. *Dromia* is the type-genus of the family DROMIIDAE, while *Dorippe* is the type-genus of the family DORIPPIDAE. Both family names should now be entered in the Official List. The genus *Notopus* De Haan, 1841, which now also is proposed for insertion in the Official List, is currently regarded as belonging to the family RANINIDAE.

15. The concrete proposals now placed before the Commission are that they should :

(1) use their plenary powers :

(a) to set aside all type designations and selections for the genus *Dromia* Weber, 1795, made prior to the proposed ruling ; and having done so

(b) to designate as the type-species of that genus the species *Cancer personatus* Linnaeus, 1758, as defined by the neotype selection made in the present application ;

(2) to place on the Official List of Generic Names in Zoology the following names :

(a) *Dorippe* (gender: feminine) Weber, 1795, *Nomencl. Entomol.* : 93 (type-species, by selection by Latreille, 1810 (*Consid. gén. Crust. Arachn. Ins.* : 96, 422) : *Cancer quadridens* Fabricius, 1793, *Ent. syst.* 2 : 464 (a subjective junior synonym of the name *Cancer frasccone* Herbst, 1785, *Vers. Naturgesch. Krabben Krebse* 1(6) : 192) ;

(b) *Dromia* (gender: feminine) Weber, 1795, *Nomencl. Entomol.* : 92 (type-species, designated under the plenary powers in (1)(b) above : *Cancer personatus* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 628) ;

- (c) *Dromidiopsis* (gender: feminine) Borradaile, 1900, *Proc. zool. Soc. Lond.* 1900: 572 (type-species, by monotypy: *Dromia australiensis* Haswell, 1882, *Proc. linn. Soc. New S. Wales* 6(4) : 755) ;
- (d) *Notopus* (gender: masculine) De Haan, 1841, *Fauna Japon. Crust.* (5) : 137, 138, 139 (type-species, by monotypy : *Cancer dorsipes* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 630) ;
- (3) place on the Official List of Specific Names in Zoology the following names :
 - (a) *australiensis* Haswell, 1882, as published in the combination *Dromia australiensis* (name of the type-species of the genus *Dromidiopsis* Borradaile, 1900) ;
 - (b) *dormia* Linnaeus, 1763, *Amoenit. Acad.* 6 : 413, as published in the combination *Cancer dormia* ;
 - (c) *dorsipes* Linnaeus, 1758, as published in the combination *Cancer dorsipes* (name of the type-species of the genus *Notopus* De Haan, 1841) ;
 - (d) *frascone* Herbst, 1785, *Vers. Naturgesch. Krabben Krebse* 1(6) : 192, as published in the combination *Cancer frascone* (oldest available name for the type-species of the genus *Dorippe* Weber, 1795) ;
 - (e) *lanatus* Linnaeus, 1767, *Syst. Nat.* (ed. 12) 1 : 1044, as published in the combination *Cancer lanatus* ;
 - (f) *personatus* Linnaeus, 1758, as published in the combination *Cancer personatus* (the name of the type-species of the genus *Dromia* Weber, 1795, as designated under the plenary powers in (1)(b) above) ;
- (4) place on the Official List of Family-Group Names in Zoology the following names :
 - (a) DORIPPIDAE (emendation by White, 1847 (*List. Crust. Brit. Mus.* : 53) of DORIPPIDEA) De Haan, 1841, *Fauna Japon. Crust.* (5) : 120 (type-genus : *Dorippe* Weber, 1795) ;
 - (b) DROMIDAE (emendation by Ortmann, 1892 (*Zool. Jb. Syst.* 6 : 543) of DROMICEA) De Haan, 1833, *Fauna Japon. Crust.* (1) : ix (type-genus : *Dromia* Weber, 1795) ;
- (5) place on the Official Index of Rejected and Invalid Generic Names in Zoology the following names :
 - (a) *Dorippe* Fabricius, 1798, *Suppl. Ent. syst.* : 322, 361 (a junior homonym and a junior objective synonym of *Dorippe* Weber, 1795) ;
 - (b) *Dromia* Fabricius, 1798, *Suppl. Ent. syst.* : 320, 359 (a junior homonym of *Dromia* Weber, 1795) ;
 - (c) *Notogastropus* Vosmaer, 1763, *Mém. Math. Phys. Acad. Sci. Paris* 4 : 635 (a name published in a non-binominal work) ;
 - (d) *Noto-gastropus* Vosmaer, 1765, *Uitgez. Verh. Werken Soc. Weetensch. Europ.* 10 : 119 (a name published in a non-binominal work) ;
- (6) place on the Official Index of Rejected and Invalid Specific Names in Zoology the following names :

